

# HP StorageWorks

## Controller Blower Replacement Instructions



These instructions apply to the EVA 4000/6000/8000 product family. The part may also be used in other HP products. Please refer to documentation for your specific product for detailed replacement instructions.

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[www.hp.com](http://www.hp.com)



### Warranty Information

If the product in which this part is being replaced is still under HP warranty, then the replacement part(s) referred to in these Replacement Instructions is provided under the terms and conditions of the Hewlett-Packard Company Limited Warranty for that product. A copy of this Limited Warranty may be viewed at: <http://h18006.www1.hp.com/products/storageworks/warranty.html>

If this is a trade sale part (product out of warranty), then the replacement part(s) referred to in these Replacement Instructions is provided under HP's express limited warranty statement, which may be viewed at: [http://customerops.corp.hp.com/1sw/pdm\\_om/warranty\\_support/policies/2330100.doc](http://customerops.corp.hp.com/1sw/pdm_om/warranty_support/policies/2330100.doc)

The replacement part takes on either the Limited Warranty Period of the part being replaced or a ninety-day period that begins upon installation of the replacement part, whichever is greater.

The only warranty for this replacement product is as noted above. Nothing in these replacement instructions should be construed as constituting an additional warranty. The information provided in these replacement instructions is provided "AS IS" and HP is not liable for technical or editorial errors or omissions contained herein.

### About This Document

This document describes the procedure for replacing the blower used in Enterprise Virtual Array 4000/6000/8000 products.

### Before you begin

Observe the following precautions when replacing a battery.

#### ⚠ CAUTION:

Removing a blower significantly changes the air flow within the enclosure. Both blowers must be installed for the enclosure to cool properly. If a blower fails, leave it in place in the enclosure until a new blower is available to install.

Parts can be damaged by electrostatic discharge. Use proper anti-static protection. Refer to the documentation that shipped with your system for additional information.

Have a copy of the product User Guide available for reference. You can download a copy of the User Guide from the product support page on the HP web site.

### Verifying component failure

Before replacing a blower, use the following methods to verify the component failure:


#### ⚠ CAUTION:

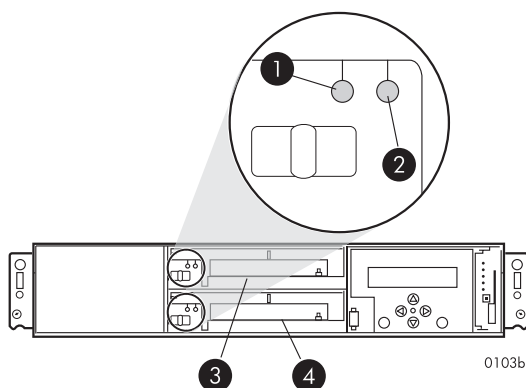
If Command View EVA does not present a status consistent with that of the blower status indicators, or if Command View or the System Event Analyzer indicates multiple hardware failures, contact HP support for assistance. The HP support web site is located at <http://www.hp.com/support>

- Analyze any failure messages you may have received from system monitoring (System Event Analyzer).
- Check status using Command View EVA:

### CAUTION:

If you are running HP StorageWorks Command View EVA 4.0, the blower numbering presented in the management interface is inconsistent with the numbering used in the storage system and reported by the ISEE/WEBES monitoring tool. HP Command View EVA 4.0 identifies the top blower as 1 and the bottom blower as 2. The correct numbering should be 0 and 1 respectively. Remember to make this conversion when replacing a blower. This inconsistency is corrected in later versions of HP Command View EVA.

- In the Navigation pane, select **Storage system > Hardware > Rack > Controller enclosure > Controller**
  - In the Content pane, select the **Enclosure** tab. The status is displayed in the **Cooling System** field. The status should be Failed .
  - To help identify the correct enclosure, click **Locate > Locate On** to display **Locate Confirmed** on the controller operator control panel (OCP). The blue Unit ID indicator will also turn on.
- Check the blower status indicators. See Figure 1. The fault indicator (2) should be on. To view the status indicators it may be necessary to remove the front panel as described in Section 4.



**Figure 1 Blower status indicators**

- Status indicator
- Fault indicator
- Blower 0
- Blower 1

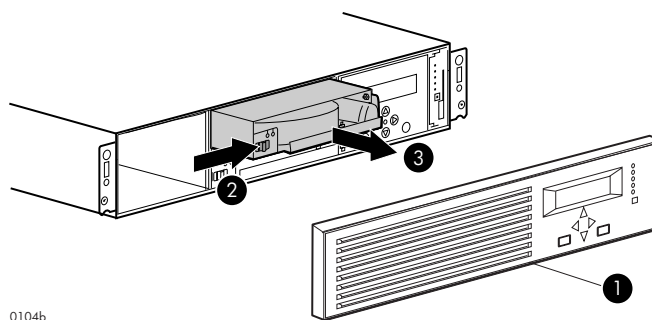
## Removing a blower

### WARNING!

The blower motor does not stop immediately when the blower is removed. Keep your fingers away from the blower blades until the motor stops.

- Remove the front panel (1) by grasping the panel at each end pulling it off the enclosure.

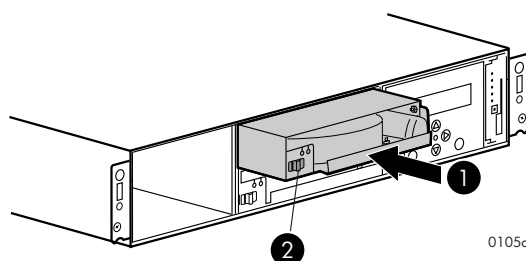
- Move the wine-colored mounting latch (2) to the right, and pull the blower out of the enclosure (3).



**Figure 2 Removing a blower**

## Installing a blower

- Position the blower as high in the slot as possible, then slide the blower into the enclosure (1) until the mounting latch (2) engages.



**Figure 3 Installing a blower**

## Verifying proper operation


After replacing the blower, check the following to verify that the component is operating properly:

### NOTE:

It may take up to 10 minutes for the component to display good status.

- Blower should begin operating immediately.
- Check the blower status indicators. See Figure 1
  - The status indicator (1) should be on.
  - The fault indicator (2) should be off.

After checking the status indicator, install the front panel on the enclosure by pressing it firmly into place. Also clear the locate message on the OCP by pressing the Escape button.

- From Command View EVA
  - Navigate back to the component and check the status. It should be .
  - Turn off the locate function by clicking **Locate > Locate Off**

## Returning the failed component

Please follow the return instructions provided with the new component.